

identified as Gay's *J. canadensis*, var. α . In the absence of a type-specimen, Laharpe's note of the resemblance of the two is certainly pretty conclusive and little good can come by replacing this well-grounded interpretation by a new guess which at best simply shifts the names without adding anything of finality to the solution.

Juncus ustulatus Hoppe is treated by Buchenau, Rouy and other competent European students as one of the varieties of *J. alpinus* Vill. A characteristic inflorescence of this variety of *J. alpinus* (*J. ustulatus*) is shown in FIG. 3 (*Braun-Blanquet*, Fl. Raet. Exsicc. no. 318) and beside it a typical inflorescence of *J. brevicaudatus* (Engelm.) Fernald as FIG. 4 (Bathurst, New Brunswick, *S. F. Blake*, no. 5440). The pertinence of the original statement that Gay's *J. canadensis* β has the aspect of *J. ustulatus* is apparent. It should be clear, then, that when Engelmann stated that his *J. canadensis*, var. *brevicaudatus*, later called by him var. *coarctatus*, was Gay's *J. canadensis*, var. β , he had positive grounds for his identification and that when he originally based var. *brevicaudatus* upon Gray's *J. acuminatus* he was correctly associating the latter with *J. canadensis*, var. α of Gay. There is, then, no reasonable justification for shifting *J. brevicaudatus* to the synonymy of *J. brachycephalus*, as supposed by Mackenzie.

EXPLANATION OF PLATE 198

(All figures $\times 1$)

Panicles of (FIG. 1) *JUNCUS LAMPOCARPUS* γ Laharpe (var. *MACROCEPHALUS* (Viv.) Döll) from La Plage, Hyères, France, *F. Raine*; (FIG. 2) *J. CANADENSIS* J. Gay from Chilmark, Massachusetts, *F. C. Seymour*, no. 1147; (FIG. 3) *J. USTULATUS* Hoppe (*J. ALPINUS*, var. *MUCRONIFLORUS* (Clairv.) Aschers. & Graebn.) from the Central Alps, *Braun-Blanquet*, Fl. Raet. Exsicc. no. 318; (FIG. 4) *J. BREVICAUDATUS* (Engelm.) Fernald from Bathurst, New Brunswick, *S. F. Blake*, no. 5440.

THE POLLINIZATION OF *HABENARIA OBTUSATA*.—The small, greenish white orchid, *Habenaria obtusata* (Pursh) Richardson, is a common plant of the Canadian forest from Newfoundland to Alaska. In the Athabaska-Great Slave Lake region of northwestern Canada it is not only extremely abundant, as shown by the writer's collections and observations, but it is also by far the most common of all the orchids growing there. On several occasions during the past three summer's botanizing in this region, mosquitoes have been found carrying the pollinia of this orchid, the sticky pads of the pollinia

being fastened to the heads of the insects near the base of the mouth parts as shown in the accompanying photographs. It is possible that the great abundance of the orchids is due to an efficient polliniza-

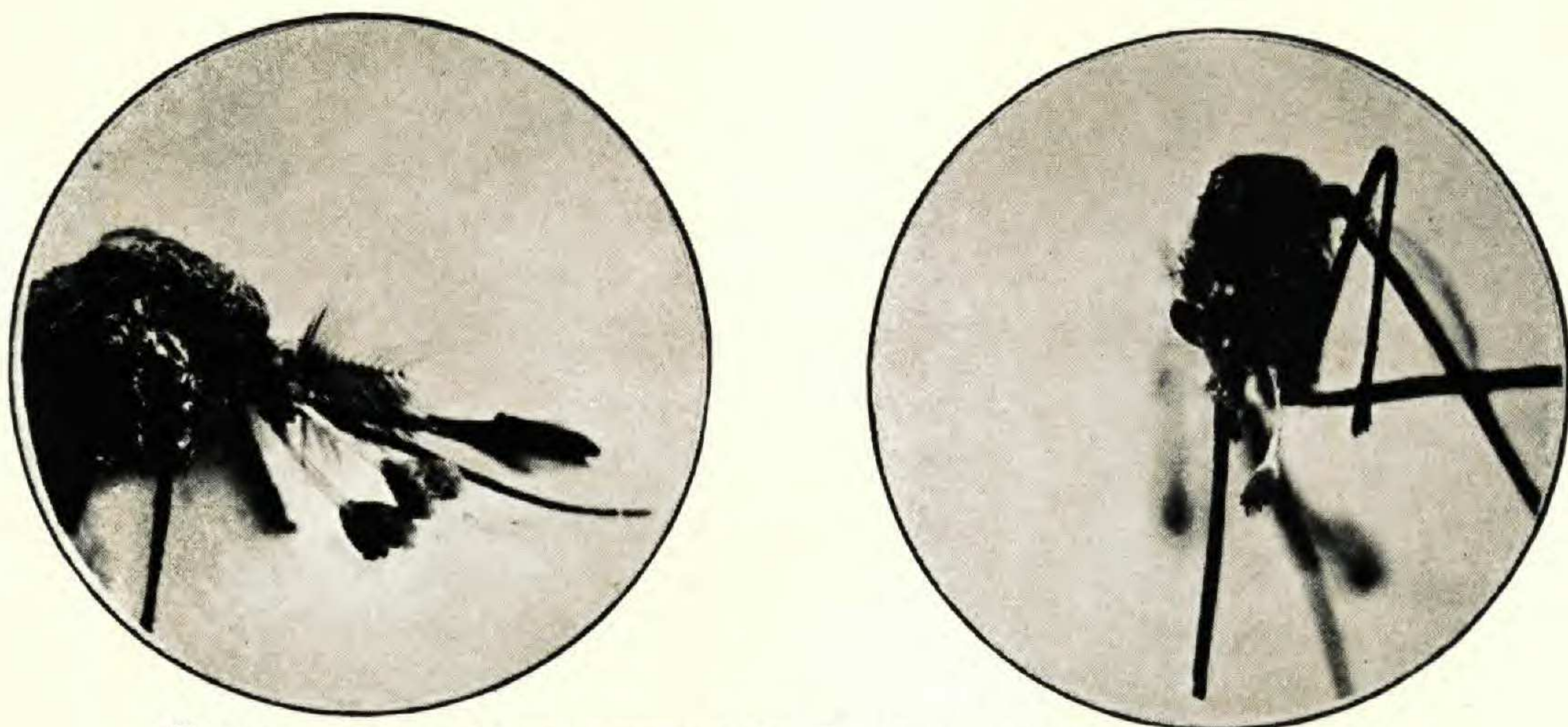


FIG. 1. Mosquitoes carrying the Pollinia of *Habenaria obtusata*.

tion carried on by the myriads of mosquitoes which inhabit the woods. The flowers produce sufficient scent and nectar to attract such sugar-loving insects.—HUGH M. RAUP, Harvard University.

A NEW SALVIASTRUM FROM THE EDWARDS PLATEAU OF TEXAS

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INTRODUCTION

While engaged in the loco survey of a portion of the Edwards Plateau region of Texas and on the occasion of investigating the southern limit of loco on Live Oak Draw in Crockett County, Texas, it became desirable to leave this Draw and cross over the divide to Howard Draw further east. Near the summit of the pass on a gravelly limestone ridge our attention was caught by some plants that seemingly were a species of *Penstemon* not hitherto collected by us, and the car was stopped to make a collection. The first plant reached revealed that it was a *Salviastrum* rather than a *Penstemon*, but that it was new to us and apparently new to science. Grateful acknowledgment is due Dr. Ivan M. Johnston of the Gray Herbarium for valuable suggestions in regard to this plant.